Jason Farrow Senior Vice President Public Affairs

### SONY

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G. Property

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August 25, 1998

Ms. Magalie R. Salas, Esq. Secretary Federal Communications Commission 1919 M Street, NW, Room 222 Washington, DC 20554

Re: CS Docket No. 98-120

Dear Ms. Salas:

Yesterday, the following representatives of Sony Electronics Inc.

Jason Farrow, Senior Vice President, Public Affairs
James Bonan, Vice President, Business Development
Christina Tallalian, Manager, Government Affairs
Brent Mori, Copyright Section, Legal and Intellectual Property
Division, Sony Corporation
Jeffrey P. Cunard, Esq., Debevoise & Plimpton

met with the following members of the FCC staff:

Jon S. Wilkins, Director, Strategic Analysis, Office of Plans and Policy
Dale N. Hatfield, Chief, Office of Engineering and Technology
Bruce Franca, Deputy Chief, Office of Engineering and Technology
Alan Stillwell, Economic Counsel, Office of Engineering and Technology
William H. Johnson, Deputy Chief, Cable Services Bureau
Michael Lance, Deputy Chief, Engineering and Technical Services Division,
Cable Services Bureau

We reviewed and discussed the attached materials covering certain aspects of consumer digital television receivers, in connection with the Notice of Proposed Rulemaking on the Carciage of the Transmission of Digital Television Broadcast Stations.

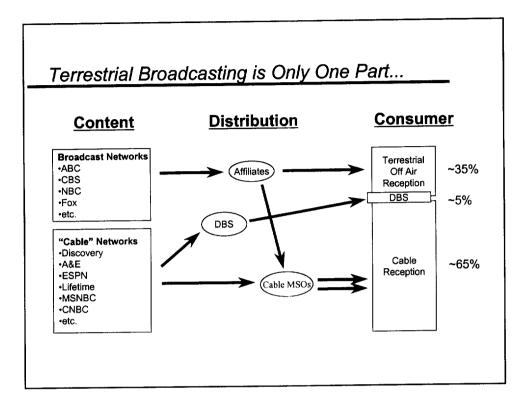
Sincerely

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# Consumer DTV

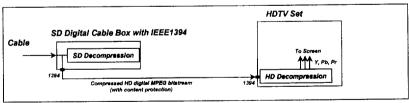
# Summary

- ◆ Most US consumers (~70%) watch TV over cable.
- ◆ To be successful, DTV must be available over cable.
- ◆ IEEE1394 (i.LINK) provides the best way to connect digital cable STBs to DTV sets, and enables copyrighted content to be digitally protected.
- ◆ Sony is strongly committed to making 1394, with digital content protection, a reality as quickly as possible. Other affected industries are showing unprecedented cooperation in resolving the remaining outstanding issues.
- ◆ In the interim other solutions may be necessary to ensure that initial DTV owners have access to off-air DTV programming that is provided over cable.

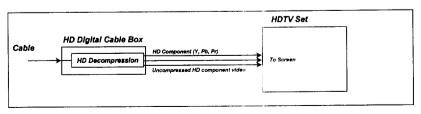


# Need for a Digital Interface

A digital interface allows a low cost SD cable or DBS box to "pass through" an HD digital signal to an HDTV set.



Without a digital interface the cable or DBS box must decompress HD.



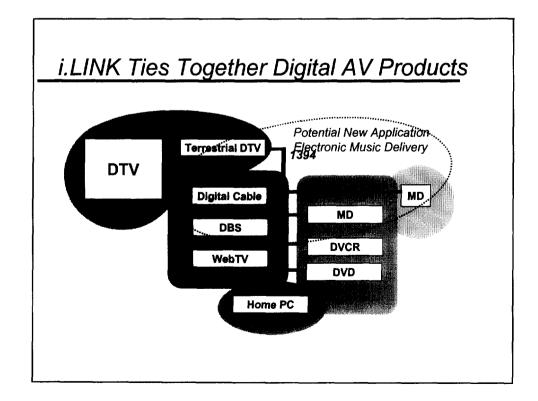
# CableLabs OpenCable Process

- ◆ OpenCable moving quickly to define architecture and interfaces by end of '98.
  - Major meeting with CE companies 6/30/98.
- For HD, CableLabs recommended a two step approach:
  - 1 Analog HD 1080i component (YPbPr) interface as interim solution.
  - 2 IEEE1394 with content protection.
- ◆ Sony working closely with CableLabs to help finalize 1394 details.

i.LINK™ Digital Networks

# Digital TV & In-home Networks

- Digital Television is a fundamental change that encompasses (and enables) virtually all others
  - New TV Displays
  - New Video Recording Formats
  - Digital Satellite
  - Digital Cable
  - Digital Terrestrial STBs
  - Interactive STBs
  - New Digital Service Applications
  - Closer "AV-IT" connection (e.g. PC-enabled devices)
- ◆ Digital in-home networks (i.LINK/1394) are the key to enabling these devices and services to interoperate.



# I.LINK will be pervasive

- Digital CE devices need to be digitally linked
  - Control
  - Resource sharing
- ◆ i.LINK/1394 is lowest cost solution with sufficient speed to handle multiple simultaneous video streams, especially HD.
- Already implemented in CE devices (digital camcorders)
- Data protection solution close at hand
- "It's going to be there anyway..."

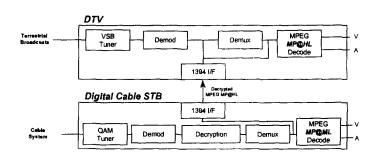
# How does i.LINK Help?

### An HD Solution

- ◆ Allows HD "pass through" from a digital cable box to HDTV
- A Content Protection Solution
- A common interface that incorporates standardized content protection
- A Potential Conditional Access Solution
- ◆ Alternative "no cost" solution to SmartCards, PCMCIA cards.
- A Downloading Solution
- Pipeline to PCs, MiniDiscs or other digital recording devices

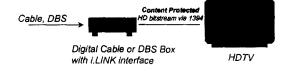
# HDTV Solution with i.LINK

◆ IEEE-1394 allows a digital cable STB to use the MPEG MP@HL decoder in a Digital Television.



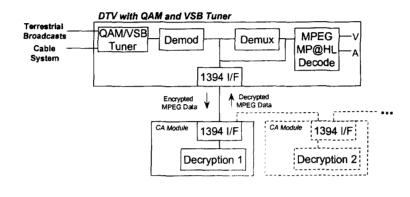
# i.LINK Enables Content Protection

 An i.LINK/1394 Interface provides content-protection for all digital material.



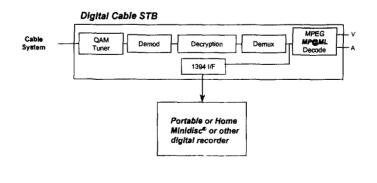
# i.LINK and Conditional Access

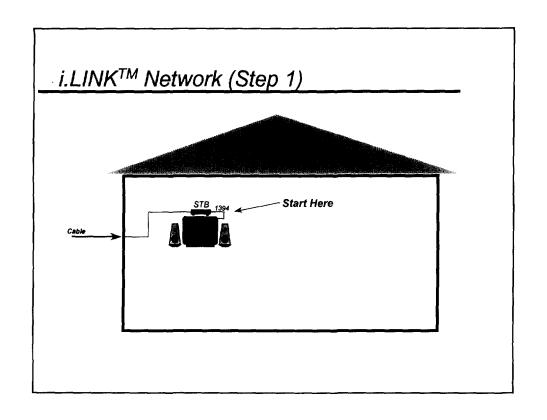
 ◆ i.LINK can allow a single, simple connection to handle high speed data decryption

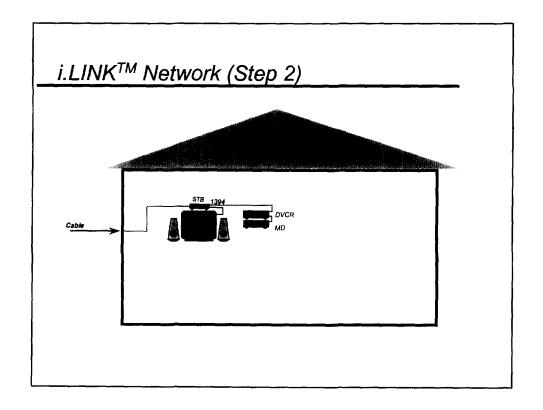


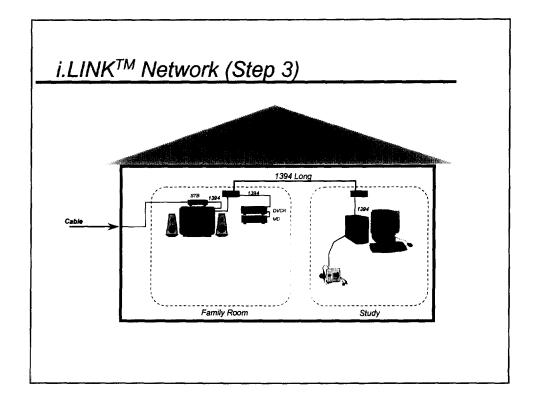
# i.LINK™ and Downloading

 Key to enabling music, or other downloading and related applications.









### Key i.LINK/1394 Developments

### 2/19/98

- Digital Content Protection Scheme proposed to CPTWG by
   Leading CE & PC Companies ("5C" Proposal)
- Hitachi, Intel, Matsushita, Sony, Toshiba

### ♦ 3/17/98

 CableLabs<sup>R</sup> OpenCable<sup>TM</sup> specifies 1394 as the linkage between OpenCable advanced digital STBs and HDTV sets.

### 3/18/98

- 8 CE companies announce open specifications for AV networking protocol to guarantee 2-way interconnectivity between AV devices from different manufacturers (HAVi).
- Grundig, Hitachi, Matsushita. Philips, Sharp, Sony, Thomson, Toshiba

# Key i.LINK/1394 Developments

### 6/30/98

- CableLabs OpenCable Meeting confirming 1394, and issuing draft specifications.
- Sony, Time Warner, Mitsubishi working closely with CableLabls

### 7/98

 CEMA creates R4.8 to parallel CableLabs OpenCable work on 1394 linkage between OpenCable advanced digital STBs and HDTV sets.

### 8/98

- Sony licenses "Home Networking Module" (HAVi compliant software) to TCI enabling 1394-equipped TCI STBs.
- ♦ 8/19/98
  - CPTWG meeting